

**BiPAC 7402(G)X(L) Series**  
**3G/ADSL2+ (802.11g) (VPN)**  
**Firewall Router**

**Quick Start Guide**

## *Declaration of Conformity*

### *Konformitätserklärung*

**in accordance with the Radio and Telecommunications Terminal Equipment Act (FTEG)  
and Directive 1999/5/EC (R&TTE Directive)**

gemäß dem Gesetz über Funkanlagen und Telekommunikationsendeinrichtungen (FTEG)  
und der Richtlinie 1999/5/EG (R&TTE)

**The Manufacturer:**

*Billion Electric Co., Ltd.*

Hersteller:

*8F, No. 192, Sec. 2, Chung Hsing Rd.,  
Hsin Tien City, Taipei Hsien*

**Declares that the product:** *BiPAC 7402GX/ 7402GXL/ 7402X/ 7402XL/ 7402G R3/ 7402GL R3/ 7402 R3/  
7402L R3  
BEC7600GT/7600T*

erklärt, dass das Produkt:

*Radio equipment*

*Funkanlage*

**Intended purpose:**

*3G/ADSL2+ (802.11g) (VPN) Firewall Router*

Verwendungszweck:

**complies with the essential requirements of §3 and the other relevant provisions of the FTEG  
(Article 3 of the R&TTE Directive), when used for its intended purpose.**

bei bestimmungsgemäßer Verwendung den grundlegenden Anforderungen des § 3 und den übrigen einschlägigen Bestimmungen des FTEG (Artikel 3 der R&TTE) entspricht.

**Harmonised standards: Health and Safety requirements contained in §3 (1) 1. (Article 3 (1) a))**

Harmonisierte Normen: Gesundheit und Sicherheit gemäß §3 (1) 1. (Artikel 3 (1) a))

*EN 60950-1: 2006*

**Harmonised standards: Protection requirements with respect to EMC §3 (1) 2, (Article 3 (1) b))**

Harmonisierte Normen: Schutzanforderungen in Bezug auf die EMV §3 (1) 2, Artikel 3 (1) b))

*EN 55022:1998 + A1:2000 + A2:2003, EN 61000-3-2:2000, EN 61000-3-3:1995 + A1:2001,*

*EN 55024:1998 + A1:2001 + A2:2003, IEC 61000-4-2:1995 + A1:1998 + A2:2000,*

*IEC 61000-4-3:2002 + A1:2002, IEC 61000-4-4:1995 + A1:2000 + A2:2001,*

*IEC 61000-4-5:1995 + A1:2000, IEC 61000-4-6:1996 + A1:2000, IEC 61000-4-11:1994 + A1:2000*

**Harmonised standards: Measures for the efficient use of the radio frequency spectrum**

Harmonisierte Normen: Maßnahmen zur effizienten Nutzung des Funkfrequenzspektrums

*EN 301 489-1 V1.4.1:2002, EN 301 489-17 V1.2.1:2002, EN 300 328 V1.6.1:2004*

**Interface specification: Air interface of the radio systems pursuant to § 3(2) (Article 3(2))**

Schnittstellenspezifikation: Luftschnittstelle bei Funkanlagen gemäß § 3(2) (Artikel 3(2))

*2.412 – 2.472 GHz*

**This declaration is issued by:**

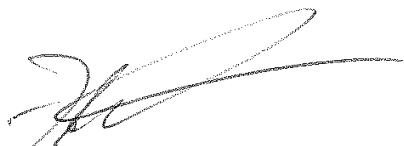
Diese Erklärung wird verantwortlich abgegeben durch:

*LONDON*

(Place)

*28/ Jan 2008*

(Date)



*Edward Kung*

*Managing Director*

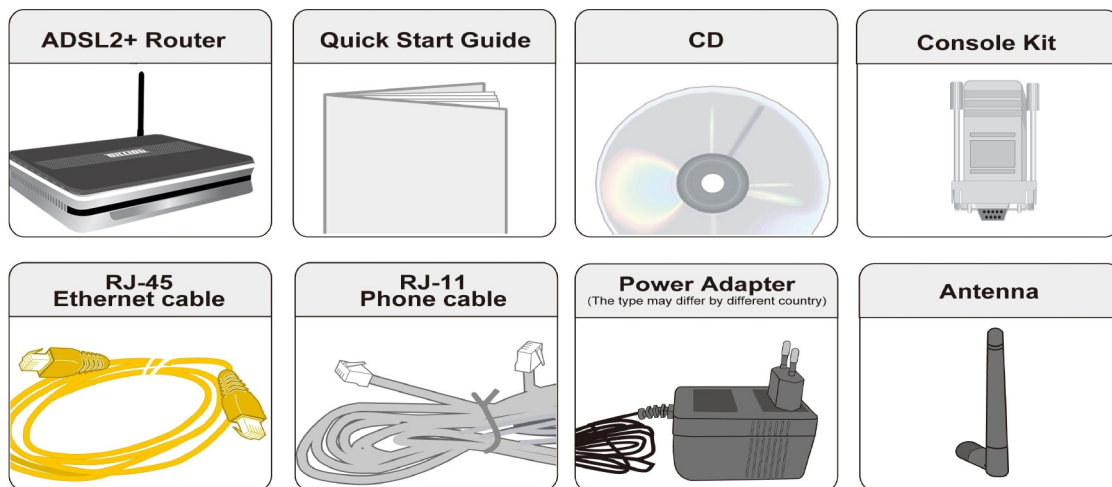
*Etec Components Ltd.*



PLEASE READ THE QUICK START GUIDE AND FOLLOW THE STEPS CAREFULLY. THIS QUICK START GUIDE WILL HELP YOU INSTALL THE DEVICE PROPERLY AND AVOID IMPROPER USAGE. IF YOU NEED MORE INFORMATION ON THIS SOFTWARE CONFIGURATION, PLEASE REFER TO THE USER'S MANUAL ON CD-ROM.

## Package Contents

- BiPAC 7402(G)X(L) Series ADSL2+ Router
- CD containing the on-line manual
- RJ-11 ADSL/telephone cable
- Ethernet (CAT-5 LAN) cable
- One 2dbi detachable antenna (Optional)
- AC-DC power adapter (12V DC, 1.2A)
- RJ-45 to RS-232 Console Kit
- This Quick Start Guide
- Splitter/ Micro-filter (Optional)



### Warning

- Do not use the router in high humidity or high temperatures.
- Do not use the same power source for the router as other equipment.
- Do not open or repair the case yourself. If the router is too hot, turn off the power immediately and have it repaired at a qualified service center.
- Avoid using this product and all accessories outdoors.



### Attention

- Place the router on a stable surface.
- Only use the power adapter that comes with the package. Using a different voltage rating power adaptor may damage the router.

## Hardware Overview



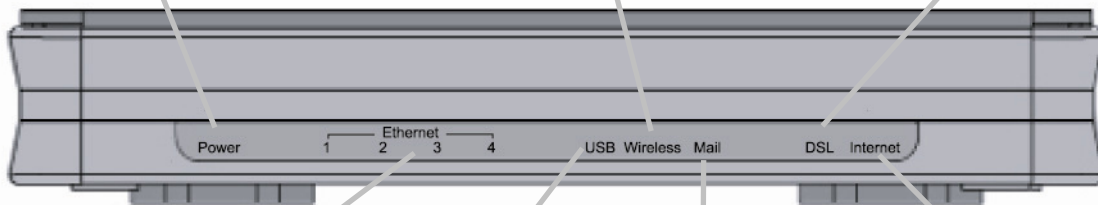
BiPAC 7402X(L) does not support 802.11g and WPS functions.

### The Front LEDs

Lit when power is ON.  
Lit red when POST (Power On Self Test) failure (not bootable) or device malfunctions

Lit green when the wireless connection is made.  
Flashes when sending/receiving data.  
Flashes regularly when WPS is active

Lit green when successfully connected to an ADSL DSLAM ("line sync")



Lit when connected to an Ethernet device.  
Green for 100Mbps;  
Orange for 10Mbps.  
Blinking when data is Transmitted / Received

Lit green when the USB device is ready.  
Flashes when sending/ receiving data.

Lit and flashed periodically when there is email in the Inbox

Lit green when IP connected.  
Flashes green when IP connected and IP traffic is passing thru the device.  
Lit red when device attempted to become IP connected and failed

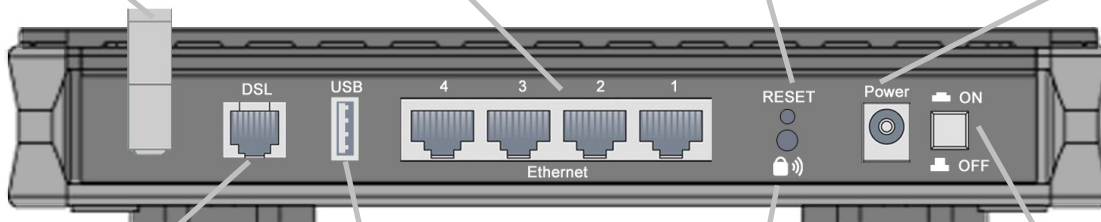
### The Rear Ports

Connect the detachable antenna

Connect your computer to a LAN port, using the included Ethernet cable

Press it to reset the device or restore to factory default settings

Connect the supplied power adapter to this jack



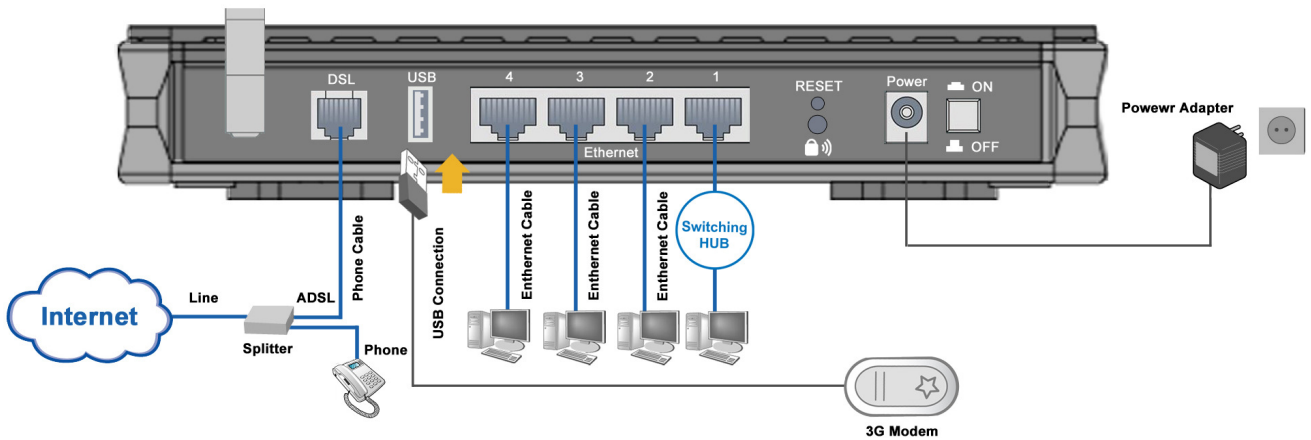
Connect the supplied RJ-11 cable to this port when connecting to the ADSL/telephone

3G/ HSDPA USB modem backup for Internet

Push WPS button to trigger Wi-Fi Protected Setup

Power ON/ OFF switch

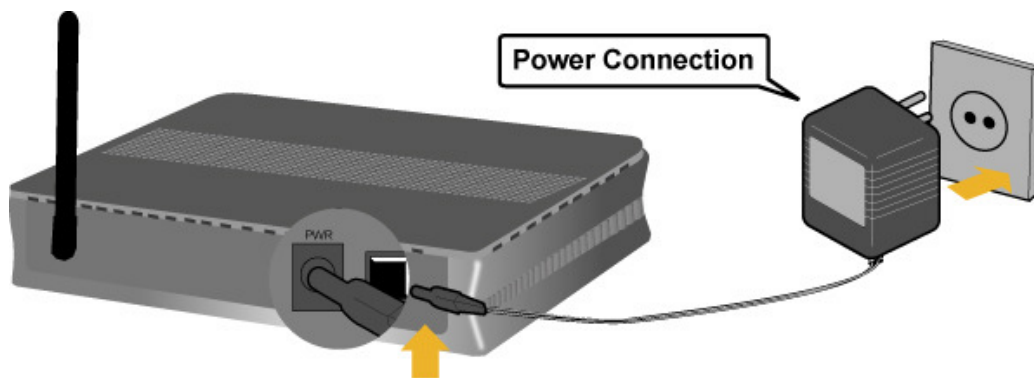
## Hardware Connection



## Hardware Installation

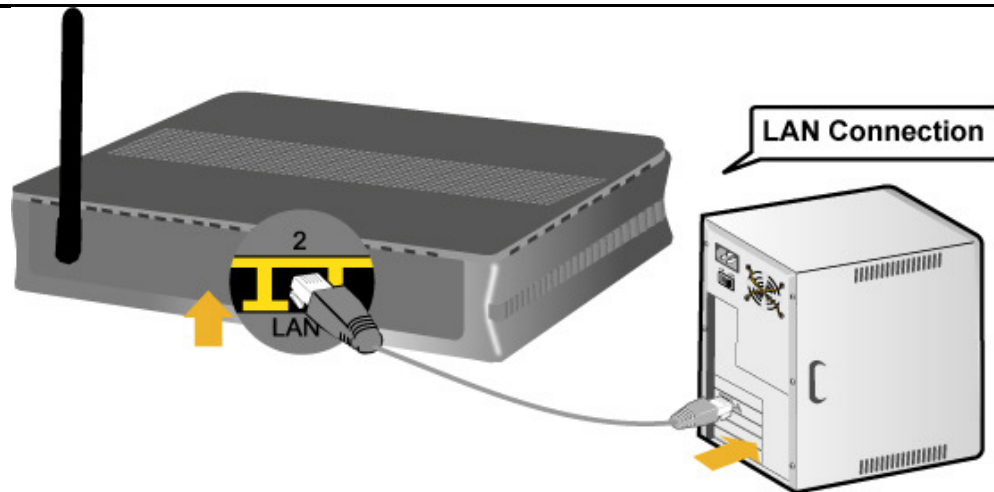
### 1. Power Connection

Plug the supplied power adapter to the wall jack and the other side to the router. Please note that the plug type may differ according to different countries.



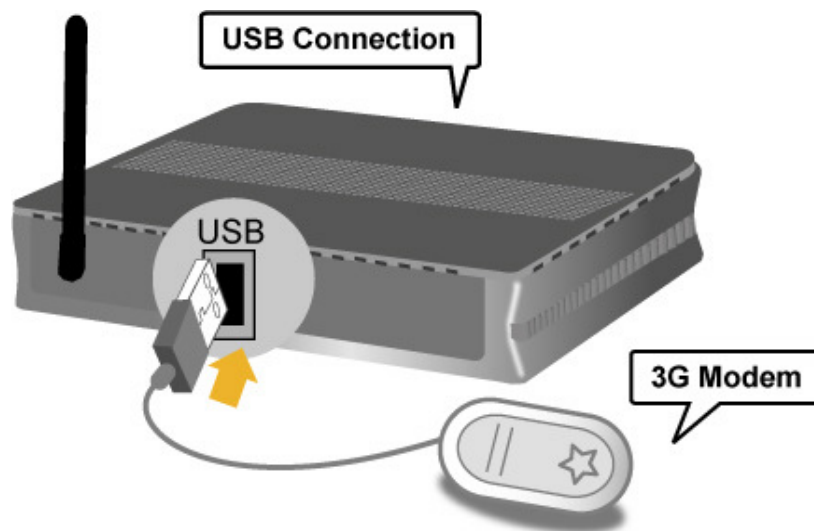
### 2. LAN Connection

Connect the supplied RJ-45 Ethernet cable to one of the Ethernet ports, and the other side to the PC's Ethernet interface.



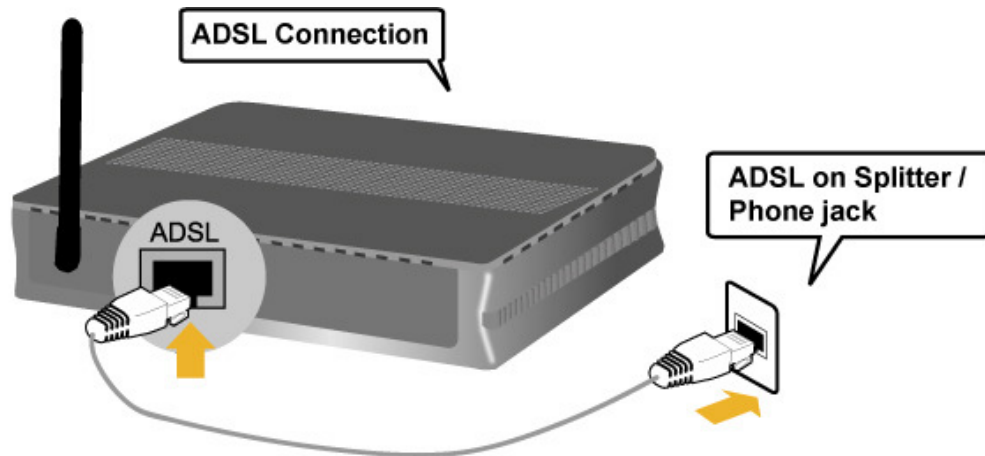
### 3. USB Connection

The USB 2.0 port supports 3G/HSDPA modem connectivity; users can even more conveniently enter access with 3G service to eliminate the limitation of the wired network and extends the last-mile service wirelessly. Incorporated the wired environment, the solution applies the auto fail-over feature to provide various applications and ensure always-on connectivity for SOHO users.



#### 4. ADSL Connection

Connect the supplied RJ-11 phone cable to the router's ADSL port, and the other side to the phone jack on the wall.

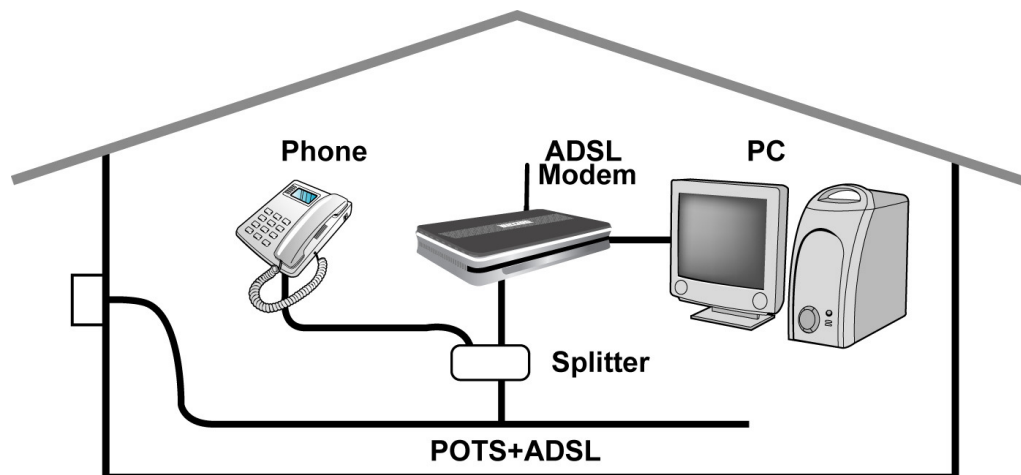


#### 5. Splitter/ Micro-filter Connection

Splitter / Micro-filter are important for ADSL installation. It helps high-frequency signals are directed to the ADSL modem, and low-frequency signals are directed to the telephone or other analog voice-channel device to prevent inter-modulation distortion and get good speed and stable ADSL sync rate.

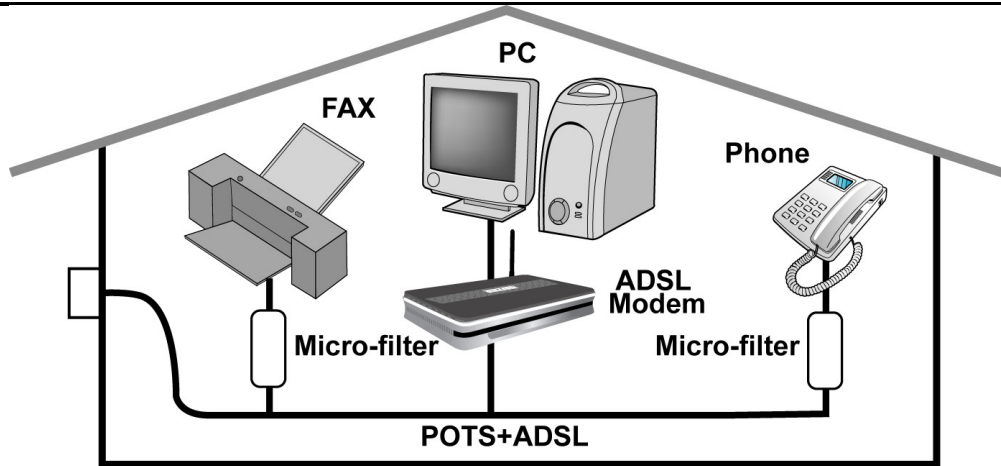
##### a) Splitter connection

If the installation has only a single telephone and a single ADSL modem, then a splitter can be employed.



##### b) Micro-filter connection

If the installation has several telephones or other analog devices, then an internal micro-filter can be employed at each analog device.



## Setup Utility

After you complete the hardware installation, insert the CD-ROM to the CD-ROM drive to perform Setup Utility for network configuration. The Setup Utility will auto-run. Follow the step-by-step configuration wizard, the utility will guide you complete the basic network configuration.

## Troubleshooting

- 1. None of the LEDs are on when you turn on the router.**

Check the connection between the adapter and the router. If the error persists, you may have a hardware problem. In this case you should contact technical support.
- 2. You have forgotten your router login and/or password.**

Try the default login and password, please refer to Chapter 3. If this fails, you can restore your router to its factory settings by holding the Reset button on the back of your router for 6 seconds or more.
- 3. Can't ping any PCs on the LAN.**

Check the Ethernet LEDs on the front panel. The LED should be on for a port that has a PC connected. If it is off, check the cables between your router and the PC. Make sure you have uninstalled any software firewall for troubleshooting. Verify that the IP address and the subnet mask are consistent between the router and the workstations.
- 4. Frequent loss of ADSL linesync (disconnections).**

Ensure that all other devices connected to the same telephone line as your router (e.g. telephones, fax machines, analogue modems) have a line filter connected between them and the wall socket (unless you are using a Central Splitter or Central Filter installed by a qualified and licensed electrician), and ensure that all line filters are correctly installed and the right way around. Missing line filters or line filters installed the wrong way around can cause problems with your ADSL connection, including causing frequent disconnections. If you have a back-to-base alarm system you should contact your security provider for a technician to make any necessary changes.



## Product Support and Contact Information

Most problems can be solved by referring to the **Troubleshooting** section in the User's Manual. If you cannot resolve the problem with the **Troubleshooting** chapter, please contact the dealer where you purchased this product.

### Contact Billion

#### WORLDWIDE

<http://www.billion.com>

7402(G)X(L) Series V100EN